UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/967,048	09/28/2001	Athanasios A. Kasapi	42P28115	4810	
45209 7590 02/18/2009 INTEL/BSTZ BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP			EXAMINER		
			NGUYEN, KHAI MINH		
1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			ART UNIT	PAPER NUMBER	
			2617		
			MAIL DATE	DELIVERY MODE	
			02/18/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)		
09/967,048	KASAPI, ATHANASIOS A.		
Examiner	Art Unit		
KHAI M. NGUYEN	2617		

		TO IV OF THE TEXT	2017	
The MAILING DATE o	of this communication appe	ars on the cover sheet with the	correspondence address	
THE REPLY FILED 30 January 20	109 FAILS TO PLACE THIS A	APPLICATION IN CONDITION FO	R ALLOWANCE.	
application, applicant must ti application in condition for al	mely file one of the following lowance; (2) a Notice of Appe	replies: (1) an amendment, affidav	Appeal. To avoid abandonment of thi it, or other evidence, which places the with 37 CFR 41.31; or (3) a Request within one of the following time	Э
a) The period for reply expires	smonths from the mailing	date of the final rejection.		
no event, however, will the Examiner Note: If box 1 is o	statutory period for reply expire la checked, check either box (a) or (ater than SIX MONTHS from the mailinb). ONLY CHECK BOX (b) WHEN TH	in the final rejection, whichever is later. Ing date of the final rejection. E FIRST REPLY WAS FILED WITHIN TW	
Extensions of time may be obtained ur have been filed is the date for purpose under 37 CFR 1.17(a) is calculated fro	s of determining the period of ext m: (1) the expiration date of the s reply received by the Office later	on which the petition under 37 CFR 1. tension and the corresponding amount shortened statutory period for reply original three months after the mailing da	136(a) and the appropriate extension fee of the fee. The appropriate extension fee linally set in the final Office action; or (2) at te of the final rejection, even if timely filed.	S
	ed on A brief in comp	liance with 37 CFR 41.37 must be	filed within two months of the date of	
filing the Notice of Appeal (3	7 CFR 41.37(a)), or any exter		avoid dismissal of the appeal. Since	
· /		nsideration and/or search (see NO		
(c) ☐ They are not deemed appeal; and/or	to place the application in bet	ter form for appeal by materially re	ducing or simplifying the issues for	
	37 CFR 1.116 and 41.33(a)).	corresponding number of finally rej	ected claims.	
<u> </u>		21. See attached Notice of Non-Co	ompliant Amendment (PTOL-324)	
<u> </u>	ome the following rejection(s):		(
 Newly proposed or amende non-allowable claim(s). 	d claim(s) would be all	lowable if submitted in a separate,	timely filed amendment canceling the	;
	nims would be rejected is prov (or will be) as follows:		ill be entered and an explanation of	
AFFIDAVIT OR OTHER EVIDENC				
 The affidavit or other evident because applicant failed to p was not earlier presented. 	rovide a showing of good and		otice of Appeal will <u>not</u> be entered vit or other evidence is necessary and	l
	t or other evidence failed to o		al and/or appellant fails to provide a	
10. ☐ The affidavit or other evider REQUEST FOR RECONSIDERATION		n of the status of the claims after e	entry is below or attached.	
11. X The request for reconsidera	ation has been considered but	t does NOT place the application i	n condition for allowance because:	
12. Note the attached Informati 13. Other:	on <i>Disclosure Statement</i> (s). ((PTO/SB/08) Paper No(s)		
/VINCENT P. HARPER/ Supervisory Patent Examiner,	Art Unit 2617			

Regarding claim 1-9 and 11-22, Applicant argues, on pages 2-4 of the remarks, that Buehrer in view of Boariu do not disclose, teach, or suggest "(1) generating a plurality of sub-carriers to redundantly transmit the information over a multi-carrier wireless communication channel; (2) wherein each of the sub-carriers is to be transmitted over an array of two or more antennas; (3) wherein each of the sub-carriers is modified by a set of complex weights to ensure that each of the sub-carriers of the wireless communication channel propagates along a different physical path to the receiver; (4) wherein the set of complex weights used to modify each of the sub-carriers includes different weights for each of the two or more antenna of the array."

The Examiner respectfully disagrees with Applicant's argument because the current claim language is broad enough to be met by Buehrer in view of Boariu.

Buehrer in view of Boariu clearly disclose:

- (1) generating a plurality of sub-carriers (see Buehrer, [0013] The transmission matrix maps the user data symbols onto the Walsh codes for each antenna and is preferably designed such that its columns are representative of the transmit antennas and are orthogonal. Similar redistribution occurs for each of the M transmit antennas such that the respective component in each of the M transmit signals associated with a given mobile's data signal modulates a unique Walsh code) to redundantly transmit (see Buehrer, abstract (each transmit antenna transmits a signal representing the result of the modulation of Walsh codes by data signals for each of the K mobiles (use the same data for each antennas))) the information over a multi-carrier wireless communication channel (see Buehrer, fig.1, [0061]);
- (2) wherein each of the sub-carriers (see Buehrer, fig.2, item 202) is to be transmitted over an array of two or more antennas (see Buehrer, antennas 1 and 2);
- (3) wherein each of the sub-carriers is modified by a set of complex weights to ensure that each of the sub-carriers of the wireless communication channel propagates along (see Boariu, col.24, line 41 to col.25, line 13) a different physical path (see Boariu, fig.3, items 314, 316, and 318) to the receiver (see Boariu, fig.3, item 322);
- (4) wherein the set of complex weights (different Walsh codes/see Boariu, symbols) used to modify each of the sub-carriers includes different weights (different Walsh codes/see Boariu, symbols) for each of the two or more antenna of the array (see Buehrer, [0091] The two modulated signals are then combined in summer 938-1 and transmitted by Antenna 1 as s1(t). As mentioned, s2(t) and s3(t) for Antenna 1 and s1(t), s2(t) and s3(t) for Antenna 2 are formed in a similar manner, see Boariu, col.24, lines 34-37).

/Khai M Nguyen/ Examiner, Art Unit 2617